

Name: _____ Date: _____
A2 CC: Quadratic Inequalities

DO NOW

Solve for x : $4^{2x-3} = \left(\frac{1}{2}\right)^{3x}$

Write the solution set of each inequality in set builder, and interval notation.

1) $x^2 + 5x + 6 < 0$

$$2) \ x^2 - 3x + 2 > 0$$

$$3) \ x^2 > 12 - x$$

$$4) \ x^2 \geq 2x$$

Let's list the steps necessary to solve a quadratic inequality:

Practice: Write the solution set of each inequality in set builder, and interval notation.
(work must be done on a separate sheet of paper)

1) $2x + 24 - 2x^2 < 0$

2) $8x - x^2 \leq 0$

3) $x^2 + 5x - 6 > 0$

4) $h^2 - 7h + 10 < 0$

5) $x^2 - 8x - 15 \geq 5$

6) $x^2 \leq 6x - 5$

7) $h^2 - h < 6$

8) $2x^2 - 8x + 8 > 0$

9) $-x^2 + 35 \geq -2x$

10) $-x^2 \geq 5x$